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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------|---------------|----------------------|------------------------------|------------------|
| 10/721,503 | 11/26/2003 | Karsten Schulz | 13909-133001 / 2003P00549 | 6173 |
| 32864 759 | 90 07/26/2005 | | EXAM | INER |
| FISH & RICHARDSON, P.C. | | CHAN, WING F | | |
| PO BOX 1022 | | | | |
| MINNEAPOLIS, MN 55440-1022 | | | ART UNIT | PAPER NUMBER |
| | | | 2643 | |

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--|--|--|--|
| Office Action Comment | 10/721,503 | SCHULZ, KARSTEN | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Wing F. Chan | 2643 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on | | | | | | |
| 2a) This action is FINAL . 2b) ⊠ This | | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 1-20 is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-20</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the o | | • | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Tripline oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priori | · • | d in this National Stage | | | | |
| application from the International Bureau | • • • • • • • • • • • • • • • • • • • • | 4 | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | Paper No(s)/Mail Da 5) Notice of Informal Pa | te atent Application (PTO-152) | | | | |
| Paper No(s)/Mail Date | 6) Other: | (1 1 0 10E) | | | | |

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 12 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 12 recites "running a software algorithm to determine the non-verbal communication", however the specification fails to disclose any software for determining non-verbal communication and claim 12 merely repeats section [0012] of the specification. Additionally, the specification fails to provide any flowchart of any sort relating to any software algorithm to perform the claimed function. Therefore, undue experimentation is required and the specification fails to meet the enablement requirement of 35 U.S.C. 112, first paragraph.

3. Claim 12 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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The specification fails to provide an adequate description of the claim limitation as set forth in claim 12; specifically there is no description of any software algorithm any software for determining non-verbal communication and claim 12 merely repeats section [0012] of the specification. Additionally, the specification fails to provide any flowchart of any sort relating to any software algorithm to perform the claimed function. Therefore, the specification fails to meet the written description requirement of 35 U.S.C. 112, first paragraph.

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-6, 8-10, 13, 14-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Fels et al (WO 98/51078 hereinafter Fels).

As to claims 1-3, 6, 8-10, 14-19, Fels discloses a method and system comprising an audio-visual input system at a first (remote user) location (e.g. see Fig. 10, page 10 line 25 to page 12 line 6), a gesture determination system at the first location to determine gesture information associated with a state of mind of the user (e.g. teleconferencing robot remote control system 119, see page 11 lines 8 to page 15 line 25; to turn and face the conferee at the second location, vertical movement to simulate bowing motion (page 2 lines 23-28) all of which is associated with a state of mind,

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physical cues of the user), a tele-embodiment unit at a second location (e.g. see Figs. 9, 11, page 12 line 7 to page 15 line 25) for receiving gesture information (control signals from the first location) and engage in movement corresponding to the gesture information, whereby the movement of the tele-embodiment unit expresses the state of mind of the user. Also see abstract, page 1 lines 1-15, page 2 line 15 to 4 line 6, page 9 line 29 to page 10 line 9, all figures, etc.

As to claim 4, see Fig. 5 for example where piston assembly 71 reads on the claimed robotic arm.

As to claim 5, note that the camera and monitor move in alignment with another, see Figs. 4-7 for example.

As to claims 13, 20, Fels teaches the video screen swivels (e.g. pivot and move in 3-D).

6. Claims 1-6, 8-10, 14-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Paulos et al (article titled "Social Tele-Embodiment: Understanding Presence", copyrighted 2001).

As to claims 1-4, 6, 8-10, 14-19, Paulos discloses a method and system comprising an audio-visual input system at a first (remote user) location (e.g. see Fig. 2, page 89), a gesture determination system at the first location to determine gesture information associated with a state of mind of the user (e.g. directed gaze, deictic gesturing, see page 91, all of which is associated with a state of mind, physical cues of the user), a tele-embodiment unit at a second location (e.g. see ProP in Fig. 2 page 89)

for receiving gesture information (control signals from the first location) and engage in movement corresponding to the gesture information, whereby the movement of the tele-embodiment unit expresses the state of mind of the user. See entire publication for other relevant sections not cited by examiner.

As to claim 5, note that the camera and monitor move in alignment with another, see Fig. 2 for example.

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 7, 11, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fels in view of Prevost et al (US PAT. NO. 6,384,829 hereinafter Prevost).

Fels differs from the claimed invention in not disclosing pre-programming selectable emotional states and movement into the tele-embodiment unit. However, it is old and well known in the art to pre-program gesture and other movement information into a database in order to provide animated movement such that processing time is cut down to provide fast, streamlined and seamless response, for example see Prevost col. 3 lines 28-39, col. 4 lines 13-23, col. 9 line 61 to col. 10 line 9. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fels to pre-programming selectable emotional states and movement into the tele-

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embodiment unit in order to provide animated movement such that processing time is cut down to provide fast, streamlined and seamless response and enhance the feel of telepresence of the conferee.

9. Claims 7, 11, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paulos in view of Prevost et al (US PAT. NO. 6,384,829 hereinafter Prevost).

Paulos differs from the claimed invention in not disclosing pre-programming selectable emotional states and movement into the tele-embodiment unit. However, it is old and well known in the art to pre-program gesture and other movement information into a database in order to provide animated movement such that processing time is cut down to provide fast, streamlined and seamless response, for example see Prevost col. 3 lines 28-39, col. 4 lines 13-23, col. 9 line 61 to col. 10 line 9. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Paulos to pre-programming selectable emotional states and movement into the tele-embodiment unit in order to provide animated movement such that processing time is cut down to provide fast, streamlined and seamless response and enhance the feel of telepresence of the conferee.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ohasi et al (JP 2002046088) discloses a robotic device for a meeting.

Jouppi et al (US PAT. NO. 6,292,713) discloses a robotic telepresence system.

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Coonan et al (US PAT. NO. 6,394,402) discloses a vertically adjustable mobile computer workstation.

Nitta (US PAT. NO. 5,347,306) discloses animated electronic meeting.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wing F. Chan whose telephone number is 571-272-7493. The examiner can normally be reached on Monday to Friday from 9 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 571-272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Win∯Æ. Chan Primary Examiner Art Unit 2643